



Typical of the cedar trees which once grew in the swamp lands of North Jersey is this forest shown in the 1855 report of the state geological survey.



Stumps of cedar trees which once graced Newark meadows were still existent in 1936 when Newark News made this picture near Pennsylvania Railroad tracks.

Vanishing Old Cedars

ABOUT 70 years ago, a Mr. Learned of Mt. Prospect avenue in Newark wrote to

William A. Whitehead, secretary of the New Jersey Historical Society, "I want to know about the ancient forest in the marsh between here and New York . . . I can get no answer, either from some aged men, the newspaper people, or any books. Everybody makes the reply that I ought to ask you."

Mr. Whitehead read the letter and his answer at a meeting of the society, where several members added what they personally knew. A few older men remembered that in their youth the cedar forest lined both sides of the road leading from Newark to New York, now the Newark turnpike. Their discussion is reported in the New Jersey Historical Society Proceedings for 1931.

Although no one now living remembers that forest, relics of it are often unearthed. Readers frequently ask The News or the Public Library why and how it was destroyed, and if it will ever come back. The last time it was called to attention was in 1948 when the State Highway Department was working on Route S-3, near Secaucus. The land there was unstable, and deep dredging had to be carried on before a suitable foundation could be laid for one stretch of the road.

THE steam shovels and suction dredges excavated enormous logs and roots of white cedar, preserved intact in the rich peat. Cedar stumps also came to light when the WPA was engaged in ditching the Kearny

Meadows for mosquito control in the early 1930s. These discoveries have led the State Highway Department and the Conservation Department to gather from local tradition and geologic reports what information is available on the history of the Cedar Swamps.

It is interesting that the earliest reference in print to the commercial use of white cedars is in the New Jersey law of 1759 which authorized the construction of a causeway of cedar logs across the swamp between the Schnyler's corner and the Hackensack River ferry. This corduroy road was later improved to become the turnpike leading from the Newark Bridge toward New York.

About the time that the highway engineers were engaged in excavating for Route S-3, Calvin Heusser, a botanist under a research grant from Rutgers University, was preparing a thesis on the Secaucus bog and its history. By examination of the plant remains in the peat of the bog, and the pollen grains buried therein, and by scientific measurements of tide levels and water salinity, he attempted to determine what caused the white cedars to vanish, and what chance they have of returning. The results of the study are given in the latest issue of the Bulletin of the Torrey Botanical Club, an organization of amateur and professional naturalists headed by Professor John Small of the New Jersey College for Women.



**COVER
PHOTO**

"Oh! What Fun It Is to Ride in a One Horse Open Sleigh" could be the title for this week's cover. In the cutter are Mrs. Margaret Warren of Hampton and Miss Marion Nemeth of Bloomsbury.

Jersey Swamps Once Held Graceful Trees

BY MIRIAM STUDLEY

Principal New Jersey History Librarian, Newark Public Library.

MR. HEUSSER quotes H. A. Manner, assistant head of the Division of Tides and Currents at Washington, who reports that the Atlantic coastline is subsiding at the rate of two one-hundredths of a foot a year. The resulting change of the soil from fresh-water swamp to brackish, or salt-marsh, has been accelerated by ditches and dykes introduced for various reasons. Railroad embankments have altered the natural contours of the land, mosquito drainage ditches have let in the salt water. Heavy water consumption upstream has lessened the flow of the tidal creeks and the two rivers, now heavily polluted by industrial wastes. What chance has the white cedar, a tree of the fresh water bogs, to be restored in such an environment?

On a recent field trip of the Torrey Club, the writer had an opportunity to see, in the Mullica River Valley in Atlantic County, a living white cedar bog that probably resembles our magnificent cedar forest of the past. Flowing between the tall dark evergreens, the cedar-stained river, brown, yet clear, has sandy banks covered with brilliant and rare wild-flowers and tangled cranberry vines.

JUST such a sight must have met the eyes of the first scientists to explore the cedar bog at New Durham, now Secaucus. They were Dr. Caspar Wistar Eddy, and John Torrey, then a medical student at Columbia's College of Physicians and Surgeons. Doctors in those days put up their own prescriptions which usually involved use of herbs and medicinal plants. The medical students were among the most enthusiastic botanists in the newly formed Lyceum of Natural History. The Lyceum had authorized in May, 1877, a "Catalogue of the Plants Growing Spontaneously within 30 Miles of the City of New York."

The little yellowed pamphlet recording the result of their field studies, completed by December, 1877, lists the rare and unusual plants that were associated with the southern white cedars in the Secaucus bog. There were wild calla lilies, brilliant pink and white lady slippers, swamp honeysuckle, wild orchids of several varieties, laurel, and the carnivorous pitcher plant, and sun dew whose sticky hairs trapped insects to be devoured. The excitement of such discoveries must have had much to do with John Torrey's desertion of medicine for a life career as botanist.

THE year after Torrey's "Catalogue" was published, Frank Pierce, a geologist, also described the white cedar swamps in a paper read before the Lyceum and published in the American Journal of Science in 1880. He stated that the whole tract between the Passaic and the Hackensack, about four miles wide and about 18 miles from south to north was once covered with woods, and he described the "hordes of trees, but little decayed, found at various depths" in the swamp. When he made his survey there were numerous islands of lofty swamp cedars in the northern part of the meadows.

He climbed Snake Hill to enjoy the view of the lofty cedars, the sea of blue-green marsh grass, the slowly winding rivers, the little villages and the distant ocean. We must not forget that these early explorers of the cedar bog were surrounded by voracious mosquitoes and by rattlesnakes and copper heads which basked in the swamp and holed up for the winter in the rocky ledges of Snake Hill.

The ditching and dyking of the land was even then going on. Mr. Pierce mentioned the "Messrs. Swartsouts" who were attempting to reclaim part of the meadows. Frank Leslie's Illustrated newspaper reports reclamation work in 1887. A very ambitious project, involving building of many dams and sluices was carried on near Kearny by the New Jersey Land Reclamation Company about 1869, resulting in much shrinkage of the marsh area. These changes were reported by Cornelius Vermeule in the New Jersey Geological Survey report for 1890. His beautiful map indicates about seven living stands of white cedars, and charts the location of the buried cedar stumps that then surrounded them. Of these islands of living trees, a few isolated cedars near Moonachie were all that remained in 1948. The last cedars in the Secaucus bog died in 1935.

AUTHORITIES do not agree on how much of the cedar forest was cut for commercial use. We know cedar was used in the early corduroy roads, and that it was a favorite material for ships and masts. As late as 1915 cedar poles were for sale along the highway near Moonachie. Very likely cedar was used for ties when the first railroads were built. From early 18th Century times there were several sawmills along the creeks between the two rivers. If one could find the account books



Sawing cedar logs by hand to make shingles once was a thriving industry in the swamp lands of North Jersey. Sometimes workmen first had to raise the fallen trees from marsh in operation called "mining buried cedar timbers."

of the first railroads and the Belleville shipyards one might gain some idea of how much cedar was cut for their use.

Historians agree, however, that fire destroyed more of the cedars than sawmill operations, reclamation and the inroads of salt water. Mr. Whitehead referred to the annual "burning days" noted in the Newark Records of Newark, when all the men from 10 to 60 were called at the beating of a drum to burn the woods and meadows. This burning, practiced also by our Indian predecessors, was to encourage the Springtime growth of a fresh crop of grass, so attractive to the deer and other game sought

by the Indians, so useful as bedding and forage for the cattle and horses of the colonists. Naturally when winds were high, the fires leapt to the tops of the evergreens, there to blaze until only the charred trunks were left. Sparks from wood burning railroads, or from careless hunters started smaller blazes.

SOME of Mr. Whitehead's associates remember the terrible fire that swept the meadows one August between 1818 and 1820. So long and widely did it burn that Newark was enveloped in smoke for two weeks.

From the early 1800s there is a tradition also of a fire

that was set to burn out the river pirates whose most secret hideaway was in the Kearny swamps. The pirates were said to have been so numerous that they actually menaced the prosperity of the port of New York.

Over 1,000 men and boys took part in the raid under the leadership of the sheriffs of Old Bergen and New York counties. They came from the West Hudson ridge, from New York, and from the harbor. In little boats they drove the pirates from the banks of the Hudson—from Staten Island and the Bayonne peninsula, and laid siege for two days to the final

(Continued on Following Page)



When the state dredged the Secaucus meadows in 1948 to make way for Route 5-3, Calvin Heuser, then of the biology department at Rutgers University, made this photo of his assistant, Alon Miller, standing by huge cedar stump.

Old Swamp Cedars

(Cont'd from Preceding Page)
stronghold opposite Snake Hill. On the third day, a wind arising in the South, they fired the woods at the tip of the Kearny peninsula, killing or capturing the pirates as they tried to escape from the flaming forest.

Another raid took place during the Civil War when many draft evaders in New York and Hudson County fled to the cedar forests. The provost marshal surrounded the cedars with his troops and set a fire which burned for miles. For years, acres of charred trunks were seen by commuters.

By this time, improved transportation had brought in lumber from the North and West, and the living cedars were too few to be commercially valuable. But men still made a living hunting and trapping deer, foxes, muskrats, opossums and raccoons in the woods between Rutherford and the Hackensack River. Some cedar wood was obtained from the buried stumps and logs, by prodding the marsh with long iron-pointed poles, as they do in South Jersey; this was used in the manufacture of cigar boxes.

In the mid-19th Century, a considerable industry grew up on the edge of the forest around Secaucus in the gathering of the foliage of the

blue bent flag, and the cat-tails, for sale in New York, or for local use in rush bottom chairs, for mats or for thatching barns and covering the sash of green houses. When Christmas greens began to be sold on the streets of New York and Newark, cedar boughs and spruce trees were cut in the remaining forest.

DURING these years, too, the cedar forests were a favorite resort of adventure-loving boys who went hunting there for snakes and turtles. As the Fall grew cold, the old men tell, gangs of boys used to sneak off to "the Cedars" on Saturdays with eggs, coffee and other foods for which they raided home pantries.

Pretending they were Francis Marion, the "Swamp Fox" of Revolutionary fame, and his men, they invaded the neighboring potato fields, then unearthed cooking utensils secreted for the purpose among the cedar roots and shrubs, and held their feasts.

A great sport among these boys was to stir up the hornets' nests they found in the trees, then run for their lives as the enraged creatures flew out in all directions. Often they saw the wild deer, hiding among the laurels, and drinking from the forest pools.

The cedars were, even then, a place of mysterious charm and beauty, and we shall not see their like here again.



Early reclamation of North Jersey marshes was done largely by manual labor. The workmen in the sketch above are building the original East Newark dike. How metal plates were pressed in swamp and covered with sod is shown below.



Fit for a King...

World Renowned HANOVIA ULTRAVIOLET QUARTZ HEALTH LAMP

Enjoyed for its many healthful properties by King George of England... King Haakon of Norway... Queen Juliana of Holland... King Frederick of Denmark... King Gustaf of Sweden... The Hon. Winston Churchill... and hundreds of equally eminent persons the world over.

A few reasons why you should own a Hanovia ultraviolet quartz health lamp:

- Helps promote growth of strong bones.
- Has a prophylactic and curative effect on rickets.
- Helpful in maintaining proper calcium and phosphorus metabolism.
- Helpful to nursing mothers and for prenatal care.
- Has a bactericidal action on the outer layers of the skin.
- Helpful to convalescents and shut-ins.

For the complete story, read our free booklet—"The Magic of Ultraviolet." Send for it today. Dept. NN-29.

HANOVIA CHEMICAL & MANUFACTURING CO.

100 CHESTNUT ST., NEWARK 5, N. J.

WORLD'S OLDEST AND LARGEST MANUFACTURERS OF ULTRAVIOLET LAMPS FOR THE HOME, THE MEDICAL PROFESSION AND INDUSTRY. SHOWROOMS IN NEW YORK, BOSTON, PHILADELPHIA, CHICAGO, DETROIT AND SAN FRANCISCO.



EVENING

It has lighted generations on their various ways — to the New Year's ball, to vespers, to the neighbors for a chat. And in its mellow light the curling smoke from a fine Dutch Masters cigar meant that grandfather was taking his after-supper stroll. Mild and flavor-some, Dutch Masters has brought lasting pleasure to generations gone and brings the same enjoyment today.

DUTCH MASTERS CIGARS

The cigar you've always wanted to smoke